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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,777

11/12/2003

Terrence W. Schmidt

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Bryan A. Santarelli
GRAYBEAL JACKSON HALEY LLP
Suite 350
155 - 108th Avenue NE
Bellevue, WA 98004-5901

EXAMINER

VASUDEVA, AJAY

ART UNIT

PAPER NUMBER

3617

MAIL DATE

DELIVERY MODE

10/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,777	Applicant(s) SCHMIDT ET AL.	
	Examiner Ajay Vasudeva	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-8, 19-24, 28, 31 and 50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8, 19-24, 28, 31 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/12/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s).

- An interface of the bay (claim 19)
- A mounting structure for releasably holding the module (claim 19)
- Module equipment for performing mine hunting, anti-submarine mission, surveillance and reconnaissance mission (claim 21)
- A weapons turret and an antenna (claim 23)

No new matter should be entered. Applicant is request to re-submit a complete set of drawing. Applicant is reminded not to include any new matter with respect to the original drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Objections

2. Claim 19 is objected to because of the following informalities:

- On line 5, after “a mission module disposed in the bay”, change “**that contains**” to – **and containing** –.
- On lines 9 and 11, change “**the vessel's one or more systems**” to – **the one or more systems of the vessel** –

Appropriate correction is requested for imparting clarity to the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 3, 4, 6, 7, 19-22, 28, 31 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Backus (US 4,476,798 A).

Backus shows a water vessel comprising a hull [12], a top deck [32] coupled to the hull, and a recessed bay [36] that is accessible via an opening defined by the deck portion of the hull (figure 1). Because the bay is disposed lower than the level of the top deck, it is considered to be disposed “below” the top deck. A mission module [10] is disposed in the bay and is configured to be coupled with different structural elements, or systems, of the vessel (figures, 4, 5 and 7). The vessel is adapted to receive different mission modules, each configured for carrying out a specific mission such as fishing vessel, personnel carrier, cargo carrier, and patrol vessel (col. 9, lines 14-17; col. 10, lines 5-38). When configured as a patrol carrier, the module contains specialized equipment -- such as different type of armament -- for performing

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the military patrol (col. 10, lines 35-38). While the mission module is coupled with the vessel, the module's equipment enables the vessel to perform the military patrol. Such armament-aided military patrol would not be enabled when the mission module is not coupled with the vessel. The bay includes an interface (see fig. 5) that allows the equipment of the module to be directly or indirectly coupled with the vessel's systems. The bay also includes a mounting structure [140, 148] that is capable of releasably holding the mission module in the bay while the mission module is coupled with the bay's interface (figures 6 and 7).

Re claim 3, 4, 6 and 7, the opening [48] at the interface is capable of facilitating exchange of fuel, water, and electrical power, as well as telecommunication signals between the vessel and the module (col. 5, lines 45-58).

Re claims 20-22, the limitation "mission module is configured to" has been interpreted to mean "mission module is capable of". Further, in the instant case, the mission of performing military patrol is considered to be a "special-operation" mission (claim 21), which is a "specific" mission (claim 22).

Re claim 28, the vessel is capable of traveling over water, and is therefore considered to be a sailing ship.

Re claim 31, the vessel comprises an outer hull [12] and an inner hull [24], and therefore is a multi-hull vessel. Alternatively, the walls of the module can also be considered to be forming an inner hull, thereby resulting in a multi-hull vessel.

Re claim 50, figure 3 shows the hull as having a plurality of elongate structures [40] that are considered to be struts. Each strut further has an oval opening which would allow a passage of fluid. The space between adjacent struts under the module defines a cavity, through which water is capable of flowing beneath the module.

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5. Claims 3-7, 19-22 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Breivik et al. (US 5,509,838 A).

Breivik et al. shows a water vessel comprising a hull [1], a top deck coupled to the hull, and a recessed bay [3] that is accessible via an opening defined by the hull (figure 2). The bay is disposed below the top deck. A mission module [2] is disposed in the bay and is configured to be coupled with various structural elements, or systems, of the vessel (figures 2, 5 and 6). The vessel is adapted to receive a mission module that is configured for carrying out the mission of transferring oil from the seabed to the vessel (col. 4, lines 1-10). The module contains specialized equipment [6, 31, 45] for transferring the oil. While the mission module is coupled with the vessel, the module's equipment enables the vessel to receive oil from the seabed. The transfer of oil from the seabed to the vessel would not be enabled when the mission module is not coupled with the vessel. The bay includes an interface (see fig. 6) that allows the equipment of the module to be coupled with the vessel's systems. The bay also includes a mounting structure [56] that is capable of releasably holding the mission module in the bay while the mission module is coupled with the bay's interface (figures 6 and 7).

Re claim 3-7, a large opening is provided at the interface (figure 5), wherein the opening is capable of facilitating exchange of fuel, water, and electrical power, telecommunication signals and personnel between the vessel and the module (col. 4, line 18-26).

Re claims 20-22, the limitation "mission module is configured to" has been interpreted to mean "mission module is capable of". Further, in the instant case, the mission of transferring oil from the seabed to the vessel is considered to be a "special-operation" mission (claim 21), which is a specific mission (claim 22).

Re claim 28, the vessel is capable of traveling over water, and is therefore considered to be a sailing ship.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backus (US 4,476,798 A).

Backus shows a water vessel comprising a hull, as above. However, Backus is silent on the hull being foil-assisted.

The Examiner takes an Official notice that the use of foil-shaped rudders in water vessels is notoriously old and well known in the art. Therefore, it would have been obvious for one skilled in the art at the time of the invention to provide the hull of Backus with a foil-shaped rudder, which would have allowed the vessel to be efficiently maneuvered. As such, the modified vessel of Backus would then be considered as having a foil-assisted hull.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backus (US 4,476,798 A) in view of Schmidt et al. (US 4,031,838 A).

Backus shows a vessel comprising a mission module configured as patrol vessel, as described in ¶4 above. The module is disclosed as comprising different type of armament (col. 10, lines 35-38). However, Backus does not expressly disclose any specific configuration of the armament.

Schmidt et al. shows a vessel comprising an armament module having a gun turret [20] (figure 1).

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It would have been obvious for an artisan to provide an armament turret in the patrol vessel of Backus, as taught by Schmidt et al. Having such an arrangement would have allowed the gun to be securely positioned on the vessel for an efficient use against the hostile entities.

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backus (US 4,476,798 A) in view of SU 1221043 A ('043).

Backus shows a vessel comprising a mission module configured as a cargo vessel (col. 9, lines 14-17; col. 10, lines 14-23), as described in ¶4 above. However, Backus does not expressly disclose any specific arrangement for loading/unloading the cargo.

SU '043 shows a vessel comprising a ramp [2] for loading heavy cargo.

It would have been obvious for an artisan to provide a ramp with the cargo vessel of Backus, as taught by SU '043. Having such an arrangement would have allowed one to load heavy cargo on the vessel, while also preventing the vessel from tilting beyond a safe threshold angle during the loading. Re claim 24, because the ramp is capable of supporting heavy cargo, such is also capable of supporting the mission module, or at least a part thereof, during the moving of the module.

Response to Arguments

10. Applicant's arguments with respect to claims 3-8, 19-24, 28, 31 and 50 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ajay Vasudeva/
Primary Examiner
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